

KROMARENKO, P.F.

New method for producing Lichtenberg figures on dielectric surfaces. Izv.vys.ucheb.zav.; fiz. no.3:131-135 '63. (MIRA 16:12)

1. Stavropol'skiy gosudarstvennyy meditsinskiy institut.

STRANSKY, Jaroslav; MIASKOVA, Miroslava; KROMAROV, Milena; KRAL, Ladislav
J. Alena spoluautor: VAREKOVY, Z.

Determination of sulfamethoxine residue in body fluids. Sborn.
cen. prac. lek. fak. Karlov. Univ. Čes. 1:563-568 1974.

J. Katedra lekarstva hemie (prednosta: MUDr. I. Mais) a Klinika
perstni infekcii (ředitel: prof. MUDr. J. Odrižák) Lekarske
fakultet, Karlovy Univerzity v Praze, Česká republika.

ASHURKOV, Vitaliy Ivanovich; KROMASH, I.L., inzh., red.

[Construction and assembly cranes for industrial construction; from materials of the "Design Office of the Main Administration for the Production and Assembly of Steel Elements" of the Ministry of Construction of the R.S.F.S.R.] Stroitel'no-montazhnye krany dlja promyshlennogo stroitel'stva; po materialam PI "Promstal'konstruktsia" Ministerstva stroitel'stva RSFSR. Mo-skva, Gosstroizdat, 1961. 91 p. (MIRA 15:9)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stva. Byuro tekhnicheskoy informatsii. 2. Glavnyy konstruktor proyekta TsEKBstroymekhavtomatika (for Ashurkov).

(Cranes, derricks, etc.)

FIALA, Jaroslav, MUDr.; VLCKOVA, Milena, MUDr.; Technicka spoluprace:
CHRASTOVA, Zdena; KROMBHOLCOVA, Jitka.

Use of heparin as an anticoagulant in blood preservation.
Vnitri lek. 11 no.8:742-749 Ag '65.

1. Ustav hematologie a krevni transfuze v Praze (reditel prof.
Dr. J. Horejsi, Dr.Sc., clen korespondent Ceskoslovenske aka-
demie ved).

KAPLAN, A. A., KROMCHENKO, G. YE.

KAPLAN, A. A., KROMCHENKO, G. YE.

Electric Lighting-Wiring

New method of connecting wires in lighting system. Rab. energ. 2 no.
4:10-12 Ap '52.

9. Monthly List of Russian Accessions, Library of Congress, July 1952 1953, Unc1.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826620014-2

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USSR

A study of the energy levels of lithium nucleus^{7Li} by magnetic analysis. L. M. Komchenko and V. A. Khomyuk. *Zhur. Eksp. i Teor. Fiz.* 33, 741 (1955). A LiD layer was deposited on a Cu foil 0.5 μ thick. The target was bombarded with deuterons 1.7-4.7 mev. In the nucleus ^{7Li} 3 groups of excitation were found with $E = 0.456$ (d,d), 4.44 (d,p) ($Q = 0.506$); 6.539 (d,p) ($Q = -1.510$) mev. Two groups were found for excitation levels of ^{7Li}. $E = 0$ ($Q = -0.120$) and $E = 0.77$ ($Q = -1.160$) mev. From the obtained reaction data of ^{7Li(d,d)He} the mass of ^{7Li} was called as 6.94353 at. mass units. S. Pakower

KROMER, F.F.

USSR/Optics - Optical Methods of Analysis. Instruments.

K-7

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 13111

Author : Kromer, F.F.

Inst :

Title : Concerning the Determination of the Concentration by the
Optical Density.

Orig Pub : Zavod. laboratoriya, 1954, 20, No 1, 42-43

Abstract : No abstract.

Card 1/1

VOLIN, A., kand. tekhn. nauk; KROMER, F., inzh.; GOLUBEV, V., inzh.

A new dust collector. Okhr. truda i sots. strakh. no.4:77-78
Okhr. truda i sots. strakh. no.4:77-78 Ap '59.
(MIRA 12:8)

1. Chelyabinskij nauchno-issledovatel'skiy institut gornogo dela, Ko-
peysk.

(Dust collectors)

KROMER, P.F.; KHIZNICHENKO, L.F.

Change of the elastic properties of molten quartz under the action
of Co₆₀ gamma-radiation. Izv. AN Uz.SSR, Ser. fiz.-mat. nauk
3:87-88 '61. (MIRA 14:8)

1. Institut yadernoy fiziki AN UzSSR.
(Gamma rays) (Solids, Effect of radiation on) (Quartz)

KROMER, P.F.

States of impurity-activated semiconductors. Izv. AN Uz.SSR. Ser.
fiz.-mat. nauk no.4:98-100 '61. (MIRA 14:9)

1. Tashkentskiy gosuniversitet imeni V.I.Lenina.
(Semiconductors)

KROMER, P.F.

Effect of Frenkel defects on the elastic constants of
copper. Izv. AN Uz. SSR. Ser. fiz.-mat. nauk 7 no.3:44-51
'63. (MIRA 16:8)

1. Institut yadernoy fiziki AN UzSSR.

KROMER, F.F.

Electric field of edge dislocations in metals and semiconductors.
Izv. AN Uz.SSR. Ser. fiz.-mat. nauk 7 no.5:63-70 '63.
(MIRA 17:8)

1. Institut yadernoy fiziki AN UzSSR.

ACCESSION NR: AP4013026

S/0166/63/000/006/0063/0074

AUTHOR: Kromer, P. F.

TITLE: Computation of Payyerls forces in dislocation theory of elasticity

SOURCE: AN UzSSR. Seriya fiziko-matematicheskikh nauk, no. 6, 1963, 63-74

TOPIC TAGS: Payyerls force, dislocation elasticity theory, neutron penetration, Young modulus, crystalline copper, dislocation line, point defect, distribution law, plastic deformation, Payyerls barrier, heat transfer, plastic flow, shift modulus

ABSTRACT: D. O. Thompson and D. K. Holmes (Journ. Appl. Phys., 27, 715, 1956, No. 7) computed the effect of radiation penetration (neutron) on the apparent change in the Young's modulus of crystalline copper. Their computations are based on assumptions on elastic properties of dislocation lines fixed at statistically disconnected defects. Starting with certain assumptions relating to formation of point defects created by radiation penetration at dislocation lines, the change (during exposure) of the distribution law of point defects at the ends of dislocation segments is derived. Under the influence of exterior stresses these segments buckle and cause

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ACCESSION NR: AP4013026

certain plastic deformations ϵ_p , which are found with the aid of the indicated distribution law. Considering plastic nondislocation deformation in relation to the exterior stress and taking into account the fact that it does not depend practically on the radiation effect of the penetrating rays, the author computes the effect of exposure on the corresponding elastic modulus of the material. In determining the deformation, Thompson and Holmes studied only the force of dislocation strain, omitting the Payyerls barrier, which is apparently justifiable if the external stress for which the elastic modulus is determined exceeds the critical shearing stress for overcoming this barrier or is sufficiently large for heat transfer and sufficiently small for plastic flow to begin. This is not acceptable when the support of the dislocated segments is due to atoms of injection or to vacancies. Since the question of the nature of support of dislocated segments has not been completely solved, then obviously it is impossible to ascertain how well the given condition can be satisfied. However, the change in elastic properties of copper by a dose of exposure strongly depends on those external stresses for which measurement of the elastic moduli is done. Therefore, it naturally follows that the Thompson-Holmes theory holds for relatively large stresses. Consequently, in the presence of the Payyerls barrier this theory must lose its strength if the moduli are measured for relatively small external stresses. The Payyerls forces influence

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ACCESSION NR: AP4013026

the regularity of change of the elastic properties of crystals under the influence of radiation penetration. Orig. art. has: 43 formulas, 1 graph, and 1 table.

ASSOCIATION: Institut yadernoy fiziki AN UzSSR (Institute of Nuclear Physics, AN UzSSR)

SUBMITTED: 06May63

DATE ACQ: 03Mar64

ENCL: 00

SUB CODE: PH, AP

NO REF Sov: 004

OTHER: 004

Card 3/3

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APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826620014-2"

ACCESSION NR: AP4044793

S/0166/64/000/003/0061/0066

AUTHOR: Domoryad, I. A.; Kromer, P. F.; Uteniyazov, Ye.; Khiznichenko, L. P.

TITLE: Inelastic phenomena in amorphous selenium

SOURCE: AN UzSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk,⁸⁻ no. 3, 1964,
61-66

TOPIC TAGS: selenium, amorphous selenium, polymer structure, creep, Internal
friction, selenium crystallization, selenium elasticity, activation energy

ABSTRACT: Like polymers, amorphous selenium consists of long molecules with interaction both between the chains and within each chain. If tension is applied to Se in the presence of heat, the molecules will orient themselves in the direction of the tension, resulting in elastic or inelastic displacements. The boundaries between the partially oriented chains of amorphous Se should behave like a viscous substance whose coefficient of viscosity decreases with increasing temperature. Under the appropriate conditions, it should therefore be possible to observe inelastic phenomena such as restorative creep under constant stress, relaxation of stress under constant strain, an elastic aftereffect following removal of the load, and internal friction, i.e. phenomena in which the strain and stress are not single-valued functions of one another in the pre-elastic region. In the present

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ACCESSION NR: AP4044793

paper, creep and stress relaxation were investigated by the method of torsional vibrations in fibers ($30-60 \mu \times 30 \text{ mm}$) of amorphous Se. A straight-line relationship was obtained between the stress (as measured by the current flowing through a galvanometer) and the strain (as measured by the deflection of a mirror) at temperatures from -20 to +30°C, indicating that the experiments were carried out in the range of elastic deformations. The creep curves shown in Fig. 1 of the Enclosure indicate that creep decreases with decreasing temperature. Mathematical expressions are developed for the relationship between creep and both temperature and time, and it is demonstrated that the ratio between the moduli of relaxation and elasticity is less than 1.0. Fig. 2 of the Enclosure shows the relaxation of stress under constant strain. Calculations revealed that the energy of activation for amorphous Se is on the order of 6200 cal./mol.; after incubation for 6-8 hrs. at 33°C, however, the energy of activation increases to approximately 12000 cal./mol., due apparently to a partial transition from the amorphous to the crystalline state. Even this figure is low compared to the activation energy for metals, due to the linear polymeric structure of selenium. Orig. art. has: 6 figures and 5 formulas.

ASSOCIATION: Institut yadernoy fiziki AM UzSSR (Institute of Nuclear Physics, AM UzSSR)

SUBMITTED: 09Mar64
Card 2/4

ENCL: 02
NO REF Sov: 004

OTHER: 001

SUB CODE: MM, 88

ACCESSION NR: AP4044793

ENCLOSURE: 01

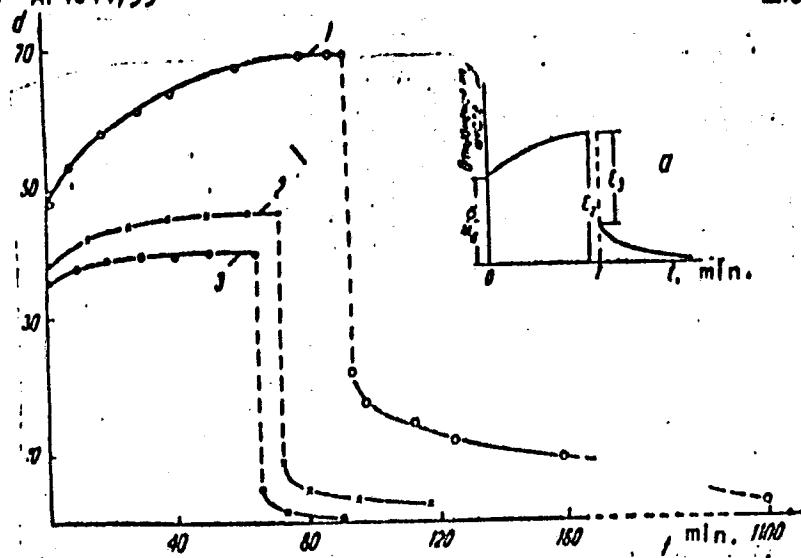


Fig. 1. Creep and creep recovery in amorphous selenium at: 1 - -20°C; 2 - 0°C; 3 - +20°C. In both graphs, ordinate = scale deflection in mm, abscissa = time in minutes.

ACCESSION NR: AP4044793

ENCLOSURE: 02

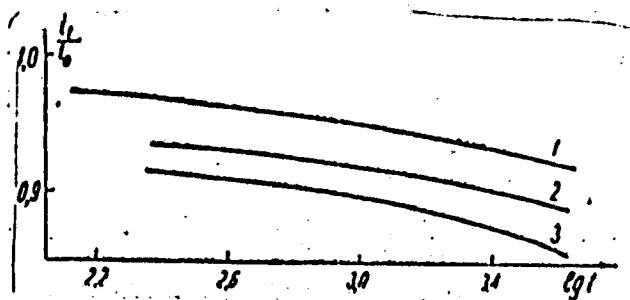


Fig. 2. Stress relaxation at constant strain: 1 - -24°C; 2 - -5°C; 3 - +5°C.

Card 4/4

L 38877-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD
ACC NR: AP6018562

SOURCE CODE: UR/0181/66/008/006/1924/1928

AUTHOR: Starodubtsev, S. V.; Kaypnazarov, D.; Khiznichenko, L. P.; Kromer, P. F.
ORG: Institute of Nuclear Physics, AN UzSSR, Tashkent (Institut yadernoy fiziki AN
UzSSR)

TITLE: Low temperature internal friction in silicon 63
SOURCE: Fizika tverdogo tela, v. 8, no. 6, 1966, 1924-1928
TOPIC TAGS: silicon, internal friction, Young modulus, temperature dependence, low
temperature research, crystal dislocation phenomenon, silicon single crystal

ABSTRACT: The purpose of the investigation was to determine the dislocation relaxation by measuring the internal friction and Young's modulus of silicon single crystals at low temperatures and low frequencies. Type KEF-250 silicon was tested at temperatures 77 to 300K and frequencies 80 to 400 Hz, in which the dislocation density ranged from 10^4 to 10^5 cm $^{-2}$. The internal friction and Young's modulus were measured by the method of free flexural oscillations in vacuum. With increasing temperature Young's modulus decreases monotonically but the internal friction exhibits a peak superimposed on a monotonic growth. The internal-friction peak occurs at 105K for 85 Hz and shifts to higher temperatures with increasing frequency. The results yielded an activation energy of 0.162 ± 0.025 ev and a relaxation time $\approx 3 \times 10^{-11}$ sec. Reasons for differences between these values and those obtained by others are discussed. The ratio of the Peierls stress to the shear modulus in silicon is 1.5×10^{-5} ,

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L 38877-66

ACC NR: AP6018562

which is one order of magnitude smaller than in metals. The results are analyzed from the point of view of the theory of Seeger, Donth, and Pfaff (Discuss. Farad. Soc. v. 23, 19, 1957), and it is shown that there are grounds for assuming that this theory is not applicable to crystals with covalent bonds. Orig. art. has: 4 figures and 7 formulas.

SUB CODE: 20/ SUBM DATE: 12Jul65/ ORIG REF: 001/ OTH REF: 014

me
Card 2/2

KROMERY, Vladimir

Crossed resistance and poly-resistance and their results in the treatment of staphylococcal infections with antibiotics. Cas. lek.cesk.99 no.37:208-215 9 S'60.

1. Statny vedecky veterinarny ustav v Bratislave, riaditel MVDr. Milos Halasa.

(STAPHYLOCOCCAL INFECTION ther)
(ANTIBIOTICS ther)

KROMICHEV, V.A.; SAMOYLENKO, V.A.; KOROBAN', G.I., inzh.-mekhanik;
ARTEM'YEV, I.M.; KOLESNIKOV, G.A.

Letters to the editor. Put' i put.khoz. 5 no.4:47 Ap '61.
(MIRA 14:7)

1. Dorozhnyy master st. Magnetity, Oktyabr'skoy dorogi (for Kromichev).
2. Zamestitel' nachal'nika distantsii puti, st. Belorechenskaya, Severo-Kavkazskoy dorogi (for Samoylenko).
3. Stantsiya Belorechenskaya, Severo-Kavkazskoy dorogi (for Koroban').
4. Nachal'nik otdela puti dorogi, stantsiya Bogotol, Krasnoyarskoy dorogi (for Artem'yev).
5. Nachal'nik sluzhby puti tresta Snezhinantratsit, g. Snezhnoye (for Kolesnikov).

(Railroads)

KROMIN, Georgiy Semenovich; KATKOV, Yevgeniy Aleksandrovich; KARUS', A.P.,
Inzhener-Mayor, redaktor; SOROKIN, V.V., tekhnicheskiy redaktor

[Principles of radar] Osnovy radiolokatsionnoi tekhniki. Moskva,
Voen.izd-vo Ministerstva obor. SSSR. Pt.1. [Electronics] Elektro-
radiotekhnika, 1956, 463 p.
(Electronics) (Radar) (MIRA 9:8)

KROMIN, G. S.

6(4); 7(7)

PHASE I BOOK EXPLOITATION SOV/3302

Katkov, Yevgeniy Aleksandrovich and Georgiy Sergeyevich Kromin

Osnovy radiolokatsionnoy tekhniki. Ch. II: Elementy i sistemy radiolokatsionnykh stantsiy (Fundamentals of Radar Engineering. Pt. 2: Elements and Systems of Radar) Moscow, Voyen. izd-vo M-va obor. SSSR, 1959. 477 p. No. of copies printed not given.

Ed.: M.V. Krylov, Engineer-Lieutenant-Colonel; Tech. Ed.: M.A. Strel'nikova.

PURPOSE: This is a textbook for use in the training of radio specialists of army radio-engineering units. It may also be used for the study of radar by persons with a secondary school education.

COVERAGE: The authors present the principles of construction and operation of the basic units of radar. They describe several types of existing radar units and assemblies, all of them taken from non-Soviet sources. Principal attention is devoted to

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Fundamentals of Radar (Cont.)

SOV/3302

explaining the physical aspects of the phenomena described. Chapters XVII to XXII were written by Ye.A. Katkov, Chapters XV and XXV by G.S. Kromin, and Chapters XIV, XVI and XXIII jointly by both authors. There are 36 Soviet references (including 19 translations). No personalities are mentioned.

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Ch. XIV. General Information on Radar	3
1. Purpose and types of radars	3
2. Block diagram of a radar	5
3. Tactical and technical characteristics of radars	10
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Ch. XV. Amplifiers. Generators of Sinusoidal Oscillations.	
Rectifiers	21
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Card 2/12

SATALKIN, A.V., doktor tekhn. nauk, prof.; KROMIN, I.P., inzh.

Lime-quartz cements and autoclave-hardened concretes with
magnesia limes. Zbor. trud. LIIZHT no.200:105-123 '62.
(MIRA 16:7)
(Concrete—Testing) (Magnesia cement)

GORB, T.V. [Horb, T.V.], doktor sel'skokhoz.nauk; TERESHCHENKO, F.K., kand.biolog.nauk; BOGATEVSKIY, O.T. [Bohaievs'kyi, O.T.], kand.veterin.nauk; POTYEMKIN, M.D. [Pot'omkin, M.D.], akademik; KNIGA, M.I. [Kniga, M.I.]; POPOV, O.Ya., kand.sel'skokhoz.nauk; KHMELIK, O.O. [Hmelyk, H.H.], kand.sel'skokhoz.nauk; SHRAM, I.P., kand.sel'skokhoz.nauk [deceased]; KOPIL, A.M., kand.sel'skokhoz.nauk; TSMLYTIN, V.K., kand.sel'skokhoz.nauk; BOZHKO, P.Yu., doktor sel'skokhoz.nauk; KROMIN, S.S., kand.sel'skokhoz.nauk; ZEMLYANSKIY, V.M. [Zemlians'kyi, V.M.], kand.sel'skokhoz.nauk; BORISHEKO, A.M. [Borysenko, A.M.], kand.biolog.nauk; ZAKHARENKO, V.B., kand.biolog.nauk; SMIRNOV, I.V. [Smyrnov, I.V.], kand.biolog.nauk; KHRABUSTOVSKIY, I.P. [Khramustovs'kyi, I.P.], kand.biolog.nauk; TORSTYANETS'KA, M.N., [Trostianets'ka, M.N.], assistent; ALESHKO, P.I., inzh.; VASIL'YEV, Vasyl'iev, O.Y., kand.tekhn.nauk; BUGAYENKO, I.I. [Buhaienko, I.I.], starshiy prepodavatel'; TRAKHTOMIROVA, O.O., kand.ekonom.nauk; BUTKO, S.D., kand.ekonom.nauk; TELESHIK, K.G. [Teleshyk, K.H.], doktor ekonom.nauk; YAROSHENKO, V.D., kand.ekonom.nauk; LISIY, I.Y. [Lysyi, I.I.], red.; YEROSHENKO, T.G. [Eroshenko, T.H.], tekhn.red.

[Handbook for zootechnicians] Dovidnyk zootekhnika. 2., dopovnene i pereroblene vyd. Kyiv, Derzh.vyd-vo sil's'kohospodars'koi lit-ry URSR, 1960. 728 p. (MIRA 1512)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for Potemkin). 2. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Kniga). (Stock and stock breeding)

KROMINA, L.V.; TISHCHENKO, D.V.

Characteristics of tars from the thermolysis of birch wood in the
combustion chamber of the V.V. Pomerantsev gas producer system.
Gidroliz i lesokhim. prom. 12 no.5:1-4 '59. (MIRA 12:10)

1. Leningradskaya lesotekhnicheskaya akademiya.
(Wood tar)

KROMINA, L.V.; TISHCHENKO, D.V.

Dyestuffs in acid water. Gidroliz.i lesokhim.prom. 13
no.4:7-9 '60. (MIRA 13:7)

1. Leningradskaya lesotekhnicheskaya akademiya.
(Wood tar) (Dyes and dyeing)

KRCMINA, L.V.; TISHCHENKO, D.V.

Chemical composition of soluble spruce tar from a combustion
chamber of a V.V. Pomerantsev's-type producer. Gidroliz. i
lesokhim. prom. 17 no.3:18-19 '64. (MIRA 17:9)

1. Lesotekhnicheskaya akademiya im. S.M.Kirova.

KROMOLOWSKA, H.

"Influence of Row Width and Density of Seedling of Vigor Maize on Crop Yields." p. 145,
(ROCZNIKI NAUK ROLICZYCH. SERIA A-ROSLINNA, Vol. 65, no. 4, 1953, Warsaw, Poland).

SO: Monthly List of East European Accession, Library of Congress, Vol 2 no 10 Oct 1953, Unclassified

PTA KROMOLOWSKA, MA.

1006

6148-067 629 1142

Zięborzakowa M., Kromolowska M. Safety Belts for Tractor Drivers.
"Pasy ochronne dla traktorzystów" Bezpłatnie woj. Higiena
Pracy, No. 3, 1981, pp. 31-35, 5 figs.

In view of the increasing quantity of haulage equipment and tractors in the building industry and in farming, a number of types and anti-vibration safety belts intended to protect the health and to ensure the proper efficiency of the drivers have been designed and tested. Constructional details and methods of using several types of safety belts, according to master types produced by the Central Institute for Protection at Work

KOGLI, L.; SKOC, A.

"First Big Polish Engine for Direct Current", p. 67, (WIADOTKI INGENIEROW
POLSKICH, Vol. V, No. 3, March 1954, Warsaw, Poland)

CC: Monthly List of East European Achievements (EKA), LC, No. 4, No. 2,
March 1955, Uncl.

KROMOLOWSKI, L.; ZILOŁO, A.

KROMOLOWSKI, L.; ZILOŁO, A. Typical construction and calculations of the commutators of direct current machines. p. 260.

Vol. 16, No. 11, Nov. 1956.
WIADOMOSCI ELEKTROTECHNICZNE
TECHNOLOGY
Warszawa, Poland

So: East European Accession, Vol. 6, No. 2, Feb. 1957

KROMOLOWSKI, L.

TECHNOLOGY

KROMOLOWSKI, L. Montaz i eksploatacja maszyn elektrycznych pradu stałego.
Warszawa, Państwowe Wydawn. Techniczne, 1957. 143p. (Assembling and using
direct-current electric machines. 1st ed. illus., bibl., diagrs., footnotes,
graphs, tables)

Vol. 103, no. 1, Jan. 1959.

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 12, Dec. '58

SOKOLOVA, Anna Dmitrievna, kand.tekhn.nauk; KOROBOV, V.M., inzh.;
ZALENSKIY, V.S., inzh., nauchnyy red.; KROMOSHCH, I.L., inzh.,
red.izd-va; PRUSSAKOVA, T.A., tekhn.red.

[Hoisting machinery for erecting steel structures] Gruzo-
pod'emye mashiny i takelazh dlia montaza stal'nykh kon-
struktsii. Izd.2. Moskva, Gos.izd-vo lit-ry po stroit.,
arkhit. i stroit.materiale, 1958. 310 p. (MIRA 12:6)
(Hoisting machinery) (Building, Iron and steel)

STANKOVSKIY, A.P., dotsent, red.; KROMOSHCH, I.L., inzh., red.;
GILMENSON, P.G., tekhn.red.

[Handbook for building-machinery operators] Spravochnik
mekhanika na stroitel'stve. Moskva, Gos.izd-vo lit-ry po
stroit., arkhit. i stroit.materiam, 1960. 819 p.

(MIRA 13:11)

(Building machinery)

ZALENSKIY, V.S.; IVANOV, A.I.; KROMOSHCH, I.L., inzh., nauchnyy red.;
BOHOVNEV, N.K., tekhn. red.

[Construction machinery and equipment] Stroitel'nye mashiny i
oborudovanie. Moskva, Gosstroizdat, 1962. 291 p.

(MIRA 15:10)

(Construction equipment)

BATENCHUK, A.N., inzh.; GREBENKIN, V.G., inzh., nauchnyy red.;
KROMOSHCH, I.L., inzh., nauchnyy red.; DOROVNEV, N.K., tekhn.
red.

[Manufacture and assembly of industrial pipelines] Izgotovlenie
i montazh tekhnologicheskikh truboprovodov. Moskva, Gosstroj-
izdat, 1962. 296 p. (MIRA 15:12)
(Pipelines)

GEL'MAN, A.S.; GRINEVICH, G.P., prof.; GRINEVICH, G.G., ZOTOV, V.P.;
KOMAROV, G.V.; PAVLOV, S.M.; FIRMON, A.V.; TRUBIN, V.A., glav.
red.; SOSHIN, A.V., zam. glav. red.; YEFIFANOV, S.P., red.;
ONLYRIYEV, I.A., red.; KHOKHLOV, B.A., red.; ZIMIN, P.A., red.;
KROMOSHCH, I.L., inzh., red.; NAUMOVA, G.D., tokhn. red.

[Handbook on loading, unloading, and conveying operations in
construction] Sptavochnik po pog.uzochno-razgruzochnym i trans-
portnym rabotam na stroitel'stve. Pod red. G.P.Grinevicha.
Moskva, Gortroilidat, 1962. 376 p. (MFA 15:9)
(Material handling) (Building materials)

FROLOV, Petr Terent'yevich; CHUDAKOV, Konstantin Petrovich;
ZELENKOV, G.I., kand. tekhn. nauk, dots., retsenzent;
MALOLETKOV, Ye.K., inzh., retsenzent; YEFREMENKO, V.P.,
inzh., nauchnyy red.; KROMOSHCH, I.L., inzh., nauchnyy
red.; GOL'DBERG, T.M., tekhn. red.

[Operation of construction equipment] Ekspluatatsiya
stroitel'nykh mashin. Moskva, Gosstroizdat, 1963. 279 p.
(MIRA 16:6)

1. Zaveduyushchiy kafedroy "Ekspluatatsiya dorozhnykh mashin"
Moskovskogo avtodorozhnoy instituta (for Zelenkov). 2. Nachal'-
nik laboratori ekspluatatsii stroitel'nykh mashin Nauchno-
issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhn-
icheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhi-
tektury SSSR (for Maloletkov).

(Construction equipment)

KAZARINOV, V.M., kand. tekhn. nauk; IZHEVSKIY, K.K., inzh.; FOKHT, L.G., inzh.; KOTSANDI, I.A., inzh.; ANUCHKINA, N.F., inzh.; POLYAKOV, V.I., kand. tekhn. nauk; GLAZUNOV, V.N., kand. tekhn. nauk; PAVLOVA, Ye.N., inzh.; POLOSIN, M.D., inzh.; KROMOSHCH, I.L., inzh., nauchn. red.; SHERSTNEVA, N.V., tekhn. red.

[Manual on the mechanization of small-scale operations carried out on building sites remote from major construction points] Spravochnoe posobie po mekhanizatsii melkikh ras-sredotochenykh stroitel'nykh rabot. Moskva, Stroizdat, 1964. 415 p. (MIRA 17:3)

1. Moscow. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stva.

ZAKHAROV, Yakov Yakovlevich; KROMOSHCH, I.L., inzh., nauchn.
red.; BOROVNEV, N.K., tekhn. red.

[Industrial training in technical schools] Proizvod-
stvennoe obuchenie v tekhnikumakh. Moskva, Gosstroj-
izdat, 1963. 194 p. (MIRA 17:1)

NEKRASOV, Aleksandr Sergeyevich, kand. tekhn. nauk; YAKUSHEVA,
V.A., inzh., nauchn. red.; KROMOSHCH, I.L., red.

[Framed buildings with wall filling of local building
materials] Karkasnye zdaniia s zapolneniem sten mestnymi
stroitel'nymi materialami. Moskva, Stroizdat, 1964. 130 p.
(MIRA 17:5)

CHUDAKOV, K.P.; KROMOSHCH, I.L., inzh., retsenzent

[Fundamentals of the theory of durability and reliability of machinery; manual for the courses for improving the qualifications of the engineering and technical workers on the subject "Modern methods for repairing building machinery"] Osnovy teorii dolgovechnosti i nadezhnosti mashin; uchebnoe posobie dlia kursov povyshenija kvalifikatsii ITR po predmetu "Sovremennye metody remonta stroitel'nykh mashin." Moskva, Vses. zhochnyi stroitel'nyi tekhnikum, 1963. 70 p. (MIRA 17:4)

FEYGIN, Leonid Aleksandrovich; YAKUSHKIN, Georgiy Mikhaylovich
[deceased]; KROMOSHCH, I.L., nauchn. red.; NAZARENKO,
M.I., red.

[Work training of the operators of bulldozers, graders
and scrapers] Proizvodstvennoe obuchenie mashinistov
bul'dozerov, greiderov i skreperov. Moskva, Vysshiaia
shkola, 1965. 146 p. (MIRA 19:1)

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826620014-2

KROMOV, A. G.

"Effect of Periodic Nonstationarity of the Flow Through a Turbine Stage on the Active Blade Losses." Izv. VTI No. 1(1948)

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826620014-2"

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826620014-2

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826620014-2"

SOV/124-58-11-12394

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 63 (USSR)

AUTHOR: Kremov, A. O.

TITLE: On the Problem of Averaging the Parameters of a Flow (K voprosu osredneniya parametrov potoka)

PERIODICAL: Sb. nauchn. tr. Ivanovsk. energ. in-ta, 1957, Nr 7, pp 109-116

ABSTRACT: The paper analyzes the question of the change-over from local to averaged parameters of the flow of a gas in a conduit upon passing from a three-dimensional flow model (velocity, pressure, and temperature) to a one-dimensional model. The author emphasizes the well-known condition that the order of averaging each parameter should be derived as a result of the particular existing mathematical relationship of the flow and not in an arbitrary manner. Expressions are developed for averaged parameters in the equations of continuity, the quantity of motion, and energy.

N. A. Kartvelishvili

Card 1/1

KROMOV, A.G., kand.tekhn.nauk

"Atlas of designs for steam and gas turbines" by I.N.Budyka
and others, Reviewed by A.G.Kromov. Izv.vys.uchob.zav.; energ.
} no.1:141-142 Ja '60. (MIRA 13:1)

1. Ivanovskiy energeticheskiy institut im. V.I.Lenina.
(Turbines)

BOL'SHAKOV, V.I., inzh.; PLAKHOTNEV, A.N., inzh.; KAUL', R.A., kand.tekhn.
nauk; KROMOV, A.G., kand.tekhn.nauk

Increasing the economic efficiency of the AK-25-1 turbine. Elek.
sta. 32 no.8:77-80 Ag '61. (MIRA 14:10)
(Steam turbines)

SHEVKUNENKO, V.N. [author]; KROMOV, B., professor [reviewer]; MAKSIMENKOVA, A.N. [editor].

"Short course in operative surgery with topographic anatomy." V.N.Shevku-
nenko. Reviewed by B.Khromov. Edited by A.N.Maksimenkova. Vest.khir. 73
no.4:70-75 Jl-Ag '53. (MIR 6:8)
(Surgery, Operative) (Anatomy, Surgical and topographical)

KROMOV, S. P.

"On the Character of the Intertropical Convergence Zone."

report to be submitted for the Intl. Geographical Union, 10th General Assembly and
19th Intl. Geographical Congress, Stockholm, Sweden, 6-13 August 1960.

ACC NR: AP7007582

SOURCE CODE: UR/0089/66/021/002/0024/0092

AUTHOR: Leypunskiy, A. I.; Kazachkovskiy, O. D.; Shikhov, S. B.; Yurova, L. N.;
Kromov, V. V.; Shmelev, A. N.; Sukhoruchkin, V. K.

ORG: none

TITLE: Use of nonuranium dilutors of plutonium in large, fast breeder reactors

SOURCE: Atomnaya energiya, v. 21, no. 2, 1966, 84-92

TOPIC TAGS: breeder reactor, fast reactor

SUB CODE: 18

ABSTRACT: The physical characteristics of fast breeder reactors with cylindrical and annular active zones have been studied, together with the characteristic of infinite lattices of large fuel elements located in a heterogeneous manner within the material of the breeder zone. The paper presents in tabular form the results of theoretical calculations, discusses the influence of Pu^{240} and Pu^{241} , describes the change in reactivity during the irradiation process, and shows the results of investigation of the sodium temperature coefficient and the Doppler temperature coefficient. An analysis of the results shows that the use of nonuranium dilutors of plutonium in large fast reactors (with a large active volume) results in annular active zones and zones with fuel elements within the breeder composition zones having peculiarities which make them more economical than large cylindrical active zones. The authors thank I. S. Slesarev, A. M. Kuz'min, M. F. Troyanov, and V. M. Murogo for their part in carrying out the research and O. N. Gerasimovaya for helping to compile information in the article. Orig. art. has: 2 figures, 3 formulas and 5 tables. [JPRS: 39,417]

Card 1/1

UDC: 621.039.526: 621.039.543.466

KROMOYAN, T.V.

Simultaneous separation of chlorine and oxygen in hydrochloric acid electrolysis. Izv. Akad. SSR Ser. Fizika nauk 7 no. 3:67-79
My-Je '54. (MIRA 8:3)
(Electrolysis) (Hydrochloric acid)

KROMPECHER, I.; KRAMLI, A.; LEIKES, G.; VALYI-NAGY, L.; SZABO, S.

Antirachitic effect of egg shell. Acta physiol. hung. 4 Suppl:61-62
1953.
(CML 25:1)

1. Of the Institute of Biochemistry of Szeged University.

KROMPECHER, I.; KRAMLI, A.; VALYI-NAGY, T.

"The significance of eggshells in the prevention and cure of rachitis."

p. 267 (Elelmzesi Ipar) Vol. 11, no. 11/12, Dec. 1957
Budapest, Hungary

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

KROMPECHER, Istvan; PAP, Maroly; BERENYI, Pal

Callus formation after diafixation, Kiserletes orvostud. 10 no.1:
41-45 Feb 58.

1. Debreceni Orvostudomanyi Egyetem Anatomiai, Szovet- es Fejlodestani
Intezete es I. sz. Sebeszeti Klinika Baleseti es Orthopaed Osztalya.
(FRACTURES, exper.

callus form. after diaphyseal fixation in dogs (Hun))

LODY, Laszlo, Dr.; KROMPECHER, Istvan, Dr.; LELKE, Gyorgy, Dr.; MESZAROS, Lajos, Dr.; KERNER, Aurelne

Effect of eggshell feeding on blood formation in children. Orv. hetil.
99 no. 6:192-194 9 Feb 58.

1. A Nyirbatori Allami Gyakorlószamáron (vezető-foorvos: Lody Laszlo dr.)
és a Debreceni Orvostudományi Egyetem Anatomiai, Szovet- és Fejlődestani
Intézeténél (igazgató: Krompecher Istvan dr. egyet. tanár) közleménye.

(EGGS

eggshell feeding inducing increased erythropoiesis in child.
(Hun))

(ERYTHROCYTES

form., increase induced by eggshell feeding of child. (Hun))

KROMPECHER, Istvan, Dr.

Antirachitic and anti-anemic effects of eggshell. Gyermekgyogyaszat
10 no.2:42-50 Feb 59.

1. Debrecen i Orvostudomanyi Egyetem Anatomiai, Szobet- es Fejlodesztani
Intezet (Igazgato: Dr. Krompecher Istvan) kozlemenye.
(RICKETS, ther.)

eggshell, antirachitic eff. in rats & child. (Hun))
(ANEMIA, ther.)

eggshell, anti-anemic eff. in rats & child. (Hun))
(EGGS

eggshell, anti-anemic & antirachitic eff. in rats & child.
(Hun))

KROMPECHER, Istvan, dr.

Anaerobic glycolytic tissue metabolism and mucopolysaccharide formation in a case of ulcer cruris. Borgyogy.vener.szemle 35 no.5:214-220 0 '59.

(VARICOSE ULCER metab)
(MUCOPOLYSACCHARIDES metab)

BERENCSI, Gyorgy, dr.; KROMPECHER, Istvan, dr.

Mucopolysaccharides in tuberculous tissues. Tuberkulozis 13
no. 4:97-101 Ap '60.

1. A debreceni Orvostudomanyi Egyetem TBC-klinikajának (igazgató:
Pongor, Ferenc, dr.) és Anatomiai, Szovet és Fejlődéstani Intézetének
(igazgató: Krompecher, Istvan, dr.) közelmélye.
(TUBERCULOSIS PULMONARY metab.)
(MUCOPOLYSACCHARIDES metab.)

KROMPECHER, Istvan, dr.; BERENCSI, Gyorgy, dr.

Contribution to the role of histamine in experimental tuberculosis.
Tuberkulosis 13 no.10:294-296 O '60.

1. A debreceni Orvostudomanyi Egyetem Anatomiai-, Szovet- es
Fejlodestani intezetek (igazgato: Krompecher Istvan dr.) es
TBC-Klinikajnak (igazgato: Pongor Ferenc dr.) kozlemenye.
(HISTAMINE pharmacol)
(TUBERCULOSIS exper)

KROMPECHER, Istvan, dr., egyetemi tanar

Adaptation of connective tissues. Elovilag 3 no.1:28-34 Ja-Mr
'58.

KROMPECHER, Istvan; KRAMLI, Andras; VALYI-NAGY, Tibor

Significance of eggshell in the prevention and cure of rachitis. Elelm ipar 11 no.11/12:267-269 D'57.

1. Anatomiai Intezet, Debrecen (for Krompecher). 2. Orvosi Kemiai Intezet, Szeged (for Kramli). 3. Gyogyszertani Intezet, Debrecen (for Valyi-Nagy).

HUNGARY

KROMPECHER, Istvan, LASZLO, Maria, B., OLAH, Eva, H.; Medical University of Debrecen, Institute of Anatomy, Histology and Embryology (Debreceni Orvostudomanyi Egyetem, Anatomiai, Szovet- és Fejlesztési Intézet).

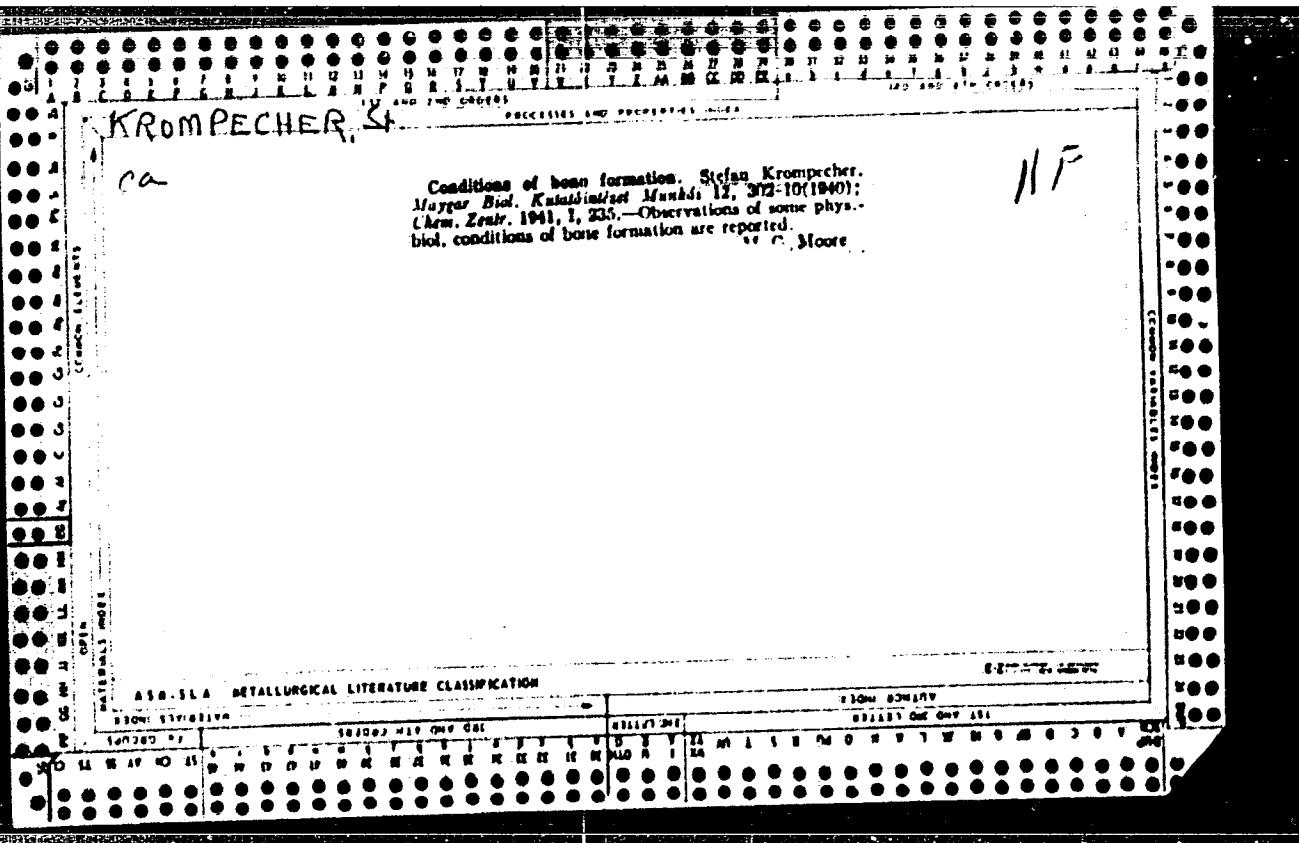
"Role of the Thyroid in the Regulation of the Blood Hexosamine Level."

Budapest, Kiserletes Orvostudomány, Vol XVIII, No 4, Aug 66, pages 337-342.

Abstract: [Authors' Hungarian summary] Supplementing earlier observations on humans and in dog experiments, the conclusion was reached that the serum hexosamine level as well as the tissue hexosamine content of the liver and the skin decreased considerably in rats which were subjected to prolonged thyroxine treatment; at the same time, the serum hexosamine level as well as the tissue hexosamine content of the liver and skin increased in rats subjected to prolonged treatment with methylthiouracil. A study of the functional histological appearance and tissue hexosamine content of the thyroid of animals subjected to prolonged treatment with thyroxine and methylthiouracil, respectively, led to the conclusion that the high hexosamine content is bound to the colloid of the thyroid. 5 Eastern European, 11 Western references. [Manuscript received 29 Jun 65.]

1/1

- 78 -



EXCERPT MEDICAL Sec. 9 Vol. 11/7 Surgery July 1957
KROMPECHER S.

3328. (610) KROMPECHER S. Anat.-Histol.-Embryol. Inst., Med. Univ. Debrecen.
"Die Beeinflussbarkeit der Gewebadifferenzierung der granulierenden
Knochenoberflächen insbesondere die der Callusbildung. Influences
causing differentiation of tissue formation on the granu-
lating surfaces of bones, with special reference to cal-
lus formation ARCH. KLIN. CHIR. 1956, 281/5 (472-512) Illus. 17
A long discussion disputing the work of Hasche-Klünder and Gelbke. On the basis
of their own experiments these authors had denied the author's principle that
pressure leads to cartilaginous callus formation. In their studies in an experiment
in which a constant pressure was maintained between the fragments while avoiding
any shearing stress, no cartilage formation could be demonstrated. Only after the
application of torsional or shearing stress could cartilage cells be seen. In this
work the author defends his opinions by reference to his own experiments and to
numerous contributions on this subject by other authors. There is no convincing
refutation of the findings of Hasche-Klünder and Gelbke. Further details may be
found in the original.

Axhausen - Berlin

KROMPECHER, St.; LEIKES, Gy.; GALAMB, B.; KERNER, A.

Effect of dietary intake of egg shells on blood formation. Acta physiol. hung. 11(Suppl):68-69 1957.

1. Institut fur Anatomie, Histologie und Embryologie der Medizinischen Universitat, Debrecen.

(BIOGS

egg shell, eff. of dietary intake on erythrocyte form,
in rats (Ger))

(ERYTHROCYTES

form., eff. of dietary intake of egg shells in rats (Ger))

BERENCSI, O.; KROMPECHER, St.

TBC Clinic; chief: Dr. F. PONOR, and the Anatomical-histological and
Embryological Institute of the Medical University at Debrecen (Anatomisch-
histologisches und Embryologisches Institut der Medizinischen Universität
zu Debrecen) Hungary

Berlin, Acta Biologica et Medica Germanica, No 1/2, 1963, pp 147-153

"The Development and Histochemical Representation of Neutral Mucopoly-
saccharides Following Skin Injury Due to Burns and Cold"

Burns
3/0

GIR

HADHAZY, Cs.; OLAH, Eva H.; KROMPECHER, St.

Adaptative shift of tissue metabolism in local hypoxia
resulting in higher mucopolysaccharide content. Acta biol.
acad. sci. Hung. 14 no.1:67-75 '63.

1. Institute of Anatomy, Histology and Embryology, Medical
University, Debrecen (Head: St. Krompecher).
(TISSUE METABOLISM) (MUCOPOLYSACCHARIDES)
(ANOXIA) (CARTILAGE) (CARBOHYDRATE METABOLISM)
(GRANULATION TISSUE) (HEXOSAMINE)

KROMPECKER, St. [Krompecher, St.]

Significance of the principle of unity of form and function in the study of directed adaptational differentiation of cells and tissues.
Arkh. anat., hist. i embr. 46 no.1:88-98 Ja (1964) (USSR 1864)

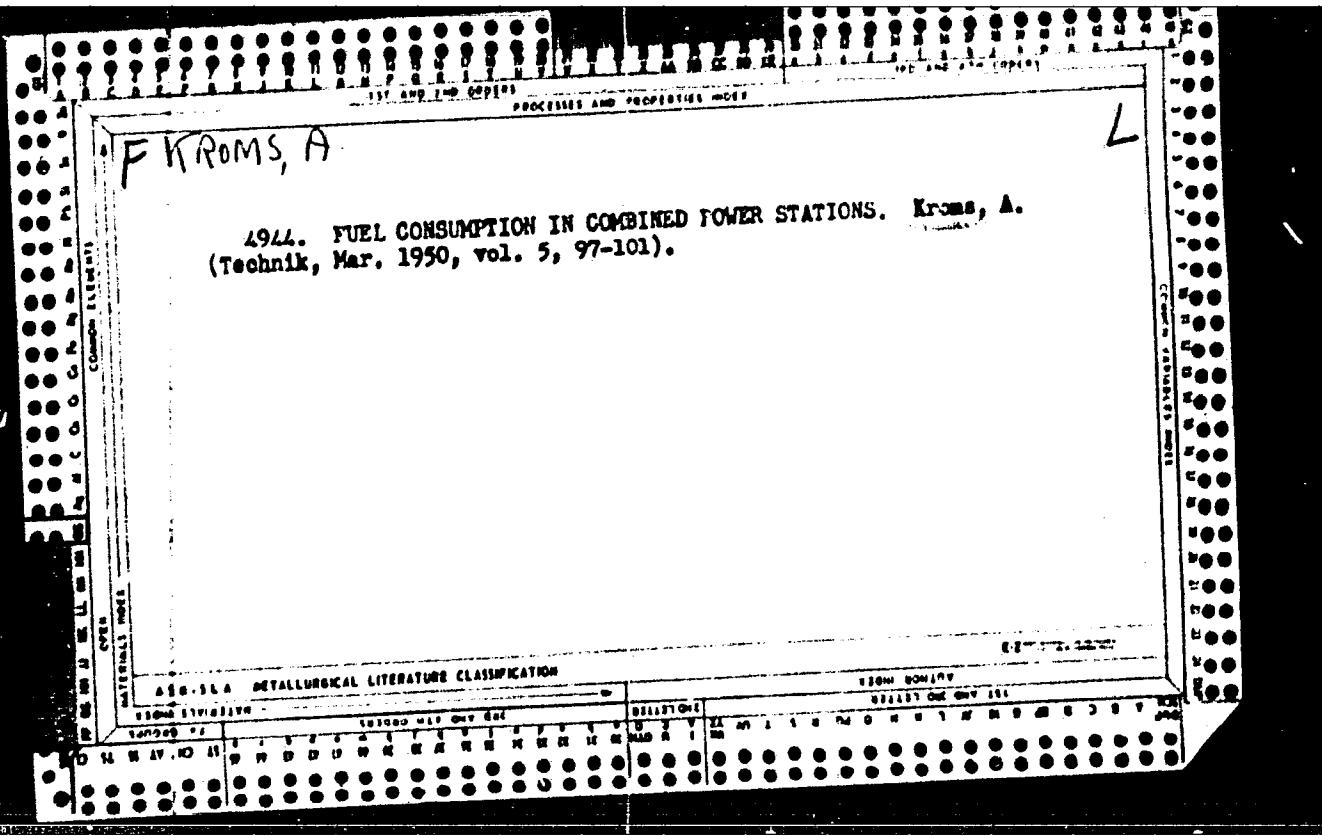
1. Institut anatomii, histologii i embriologii Obrytovskiego meditsinskogo universiteta, Vengerskaya Narodnaya Republika.

Kearney, G. G.

The location of raw materials used in tube construction.

Elektrotechnik, Vol. 1, 1947, pp. 121-5

Chem. Abs., Vol. 43, p. 5703-d



KROMS, A -

L

P

SELECTIVE OF HIGH-GEAMUTION UNITS FOR INDUSTRIAL KROMS, A.
(Technik, Oct. 1951, vol. 6, 447-456). A method is developed in detail
for the selection of steam conditions and the type of turbines to be used
in power stations supplying heat as well as electricity. The relative
merits of condensing turbines and back pressure turbines are discussed
in relation to the kind of thermal and electric load expected, and the
supply in relation to the kind of thermal and electric load expected, and
the supply system to be served. Diagrams and tables are given.

KROMSKAYA, K.M.

Cassiterite in limestones of the Zirabulak Mountains.
Zap.Uz.otd.Vses.min.ob-va no.13:128-131 '59.
(MIRA 13:7)
(Zirabulak Mountains--Cassiterite)

KOROLEV, F.A.; KROMSKIY, G.I.; SKOKOV, I.V.

Amplitude method of multiple-beam interferometry. Opt. i spektr. 14 no.3:
416-418 Mr '63. (MIRA 16:4)
(Interferometry)

ACC NR: AP7007727.

SOURCE CODE: UR/0188/67/000/001/0110/0111

AUTHOR: Skokov, I. V.; Akimov, A. I.; Kromskiy, G. I.

ORG: MGU Department of Optics (MGU Kafedra optiki)

TITLE: Determination of shock wave profile by the interferometry method

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 1, 1967, 110-111

TOPIC TAGS: rarefied gas, gas density, gas dynamics, gas flow

ABSTRACT: The authors report the results of a study to determine using a multiple-wave interferometer the structure of the shock wave formed when rarefied gas moving at supersonic speed (Mach number ≈ 4 , Reynolds number = 50, stagnation temperature = 300°K) flows past a model (disk, diameter 10 mm). The investigated model was inserted between the mirrors of a Fabry-Perot etalon, which was illuminated by a collimated light beam from a point monochromatic light source, and the uniformly illuminated interference field was photographed. The negatives were processed using the photometric method taking axisymmetrical density distribution into account. The density distribution of the shock wave along the stagnation line in the vicinity of the forward critical point is shown in Fig. 1.

Card 1/3

UDC: 533.1:535.854

ACC NR: AP7007727

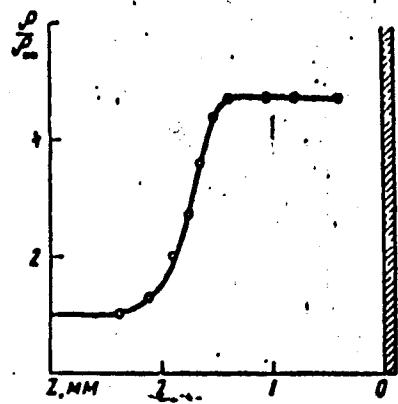


Fig. 1. Shock wave profile

P/P_m is the ratio of current density value to the density of incoming flow;
 Z - is a coordinate along the flow axis.

Card 2/3

ACC NR: AP7007727

Under experimental conditions the thickness of the shock wave has a finite value (~0.8 mm) equal to approximately four lengths of the free path of particles of the incoming flow. The graph indicates clearly that there is a region with constant density. The ratio of densities in the incoming flow is in good agreement with Rankine's relationships (within limits of 10%). The relative value of the withdrawal of the shock wave is slightly higher than when the flow is continuous. It is noted in conclusion that the multiple-wave interferometry method permits determination of the density profile, the density fields near the model and in the free flow, the geometry of the shock wave, and other gas-dynamical parameters. Orig. art. has: 1 figure. [GS]

SUB CODE: 20 SUBM DATE: 16Jul66/ ORIG REF: 004/ ATD PRESS:5117

Card 3/3

KOROLEV, F.A.; KROMSKIY G.I.; SKOKOV, I.V.

Use of the phase method of multiwave interferometry for measuring
low gas densities. Izv. vys. ucheb. zav.; fiz. no.5:61-63 '63.

(MIRA 16:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

AKIMOV, A.I.; KROMSKIY, G.I.; SKOKOV, I.V.

Sensitivity of a multiple-wave interferometer. Prib. i tekhn.
eksp. 9 no.5:172-174 S-0 '64. (MIRA 17:12)

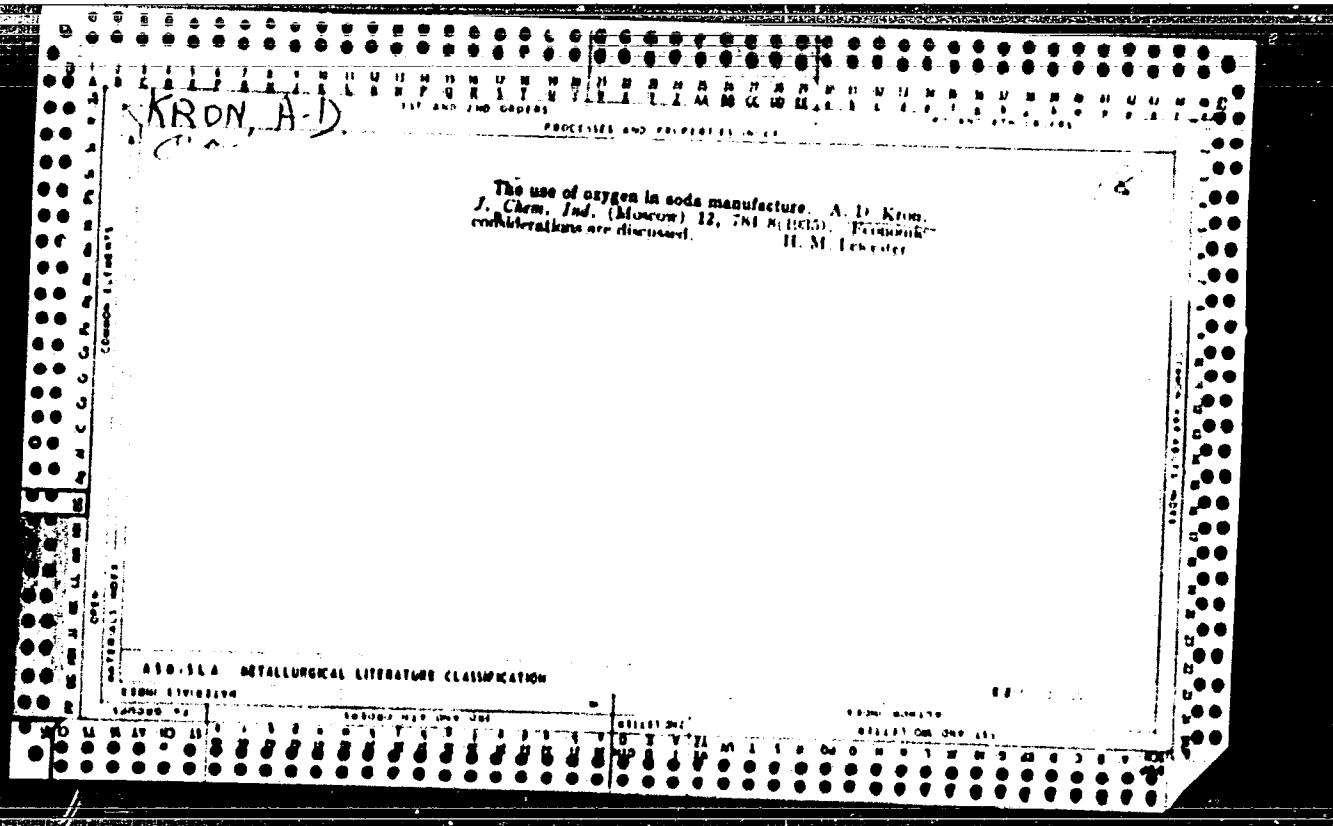
1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.

BABAYAN, A.T.; KROMYAN, T.V.

Third joint session of the chemical institute of the Academies of
Sciences of three Transcaucasian republics. Izv.AN Arm.SSR,
Khim.nauki 11 no.2:135-137 '58. (MIRA 11:11)
(Chemistry--Congresses)

KRON, Aleksandr Aleksandrovich; OSTROGORSKAYA, V.D., red.; UL'YANOVA,
M.A., tekhn. red.

[At sea and at anchor; impressions] Na khodu i na iakore; vpe-
chatleniya. Moskva, Sovetskii pisatel', 1961. 139 p.
(MIRA 15:6)
(Indonesia--Description and travel)



KRON,A.D., inzhener

Productivity of soda ash plant units from the point of view of
gas flow resistance. Khim.prom.no.2:38-40 F'47. (MIRA 8:12)

1. Gosudarstvennyy Institut po proyektirovaniyu predpriyatiy
osnovnoy khimicheskoy promyshlennosti
(Soda industry)

ANNUAL REPORT OF THE STATE BOARD OF EDUCATION, 1898.

Calculation of volume effects in linear polymer chains by the Monte-Carlo method. Vysokomol. soed., t. no. 5, 862-867 (1963).
M. A. TIKHONOV

1. Institut vystudování kultury a jazyků M. U.

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826620014-2"

KRON, A.K.; PTITSYN, O.B.

Statistical theory of volume effects in macromolecules. Vysokomolekulyarnye soed.
5 no.3:412-416 Mr '63. (MIRA 16:3)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Macromolecular compounds)

KRDN, A.K.

The Monte Carlo method for the statistical calculations of macromolecules. Vysokom. soed. 7 no.7:1228-1234 Jl '65.

(MIRA 18:8)

1. Institut vysokomolekulyarnykh scyedeneniy AN SSSR.

S/190/63/005/003/018/024
B101/3203

AUTHORS: Kron, A. K., Ptitsyn, O. B.

TITLE: Dimensions of branched macromolecules in good solvents

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 5, no. 3, 1963, 397-404

TEXT: The influence of steric effects on the dimensions of branched macromolecules is studied theoretically and the relationship between the swelling coefficient and the second virial coefficient is determined using theoretical data by W. Stockmayer, H. Fixman (Ann. N. Y. Acad. Sci., 57, 334, 1953), H. Fixman (J. Chem. Phys., 23, 1656, 1955), A. Albrecht (J. Chem. Phys., 27, 1002, 1957), and others. The following has been found for chains with m branching points, where m = 1,2,3, and f branches departing from a point:

$$\delta_0^2 = \begin{cases} \frac{3f - 2}{f} & (m = 1) \\ \frac{18f^2 - 28f + 11}{(2f - 1)^2} & (m = 2) \\ \frac{51f^2 - 90f + 40}{(3f - 2)^2} & (m = 3) \end{cases} \quad (8)$$

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5/190/63/005/003/018/024
B101/B203

Dimensions of branched...

$$\kappa = \begin{cases} \frac{1.01/4 + 1.63/ - 1.84}{\sqrt{7}(3/ - 2)} \\ \frac{1.02/4 + 5.51/4 + 3.21/4 - 17.74/ + 9.00}{\sqrt{2}/ - 1(18/4 - 28/ + 41)} \\ \frac{6.00/4 + 10.76/4 + 8.38/4 - 57.32/ + 34.13}{\sqrt{3}/ - 2(51/4 - 80/ + 40)} \end{cases} \quad (10)$$

From $A_2 = (N_A v N^2 / 2 \mu^2) (1 - 2.865 \kappa z + \dots)$ the following is calculated:

$$\lambda = \begin{cases} \frac{0.0789/4 + 0.184/ + 0.739}{\sqrt{7}(3/ 3)} & (m = 1) \\ \frac{0.600/4 - 0.0732/4 + 2.04/4 - 3.12/ + 0.578}{(2/ - 1)^{1/2}} & (m = 2) \\ \frac{2.51/4 - 2.82/4 + 7.73/4 - 10.0/ + 3.57}{(4/ - 2)^{1/2}} & (m = 3). \end{cases} \quad (10)$$

Conclusions: In good solvents and with the same molecular weight, the ratio between the dimensions of branched and of linear macromolecules approaches a constant value with increasing number of branches. The

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Dimensions of branched...

S/190/63/005/003/018/024
B101/B203

dimensions are less affected by the degree of branching in good solvents than in θ -solvents. The second virial coefficient A_2 is smaller for a solution of branched macromolecules than for a solution of comparable linear macromolecules, but the difference is small. An experimental check of these theoretical data will be necessary. There are 5 figures.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High-molecular Compounds AS USSR)

SUBMITTED: September 16, 1961

Card 3/3

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BUROV, B.M.; DARVOID, G.N.; KRON, F.TS.

Method of neutron-neutron logging for studying geological cross
sections of wells. Geol. nefti 1 no.12:60-66 D '57. (MIRA 11:1)

1. Institut nefti AN SSSR.
(Oil well logging, Radiation)

Mathematical Reviews
Vol. 14 No. 11
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Mathematical Physics

Gaponov, A. V., *One-dimensional model of the general theory of electrical machines*. Pril'by Mat. Nauk SSSR, V. 39, 18-48 (1953). (Russian)

This article paper applies the ideas of another one [same Doklady, No. 87, 404-404 (1952), these Rev. 14, 825] to the "one-dimensional problem of a cylindrical, completely linear, electrical "parent" machine whose stator and rotor are represented by two infinitely long and infinitely thin coaxial cylindrical shells with distributed surface currents parallel to their common axis (these currents represent those in the winding). The currents are assumed to be developable into Fourier series in the azimuths θ and θ' on the stator and the rotor, both measured from axial planes fixed in the respective cylinders. The coefficients of these series are regarded as generalized velocities of a Lagrangian system with a countable number of freedoms (the Lagrangian is the sum of the kinetic and magnetic energy). The validity of the (infinitely many) Lagrange equations is assumed. If the rotor current is expressed in terms of the stator angle θ , the coefficients of the expansion are recognized as nonholonomic general velocities, and the validity of the Boltzmann-Hamel equations is claimed for them. The author elects to regard the machine with a finite number of coils in the winding as the outcome of imposing infinitely many constraints on the "parent" machine, with a finite degree of freedom resulting.

(OVER)

These constraints are nonholonomic if there are commutators. One gets the impression that the author considers postulating the validity of the equations for the infinitely many parameters of the "parent" machine logically preferable to doing this for the finite number of parameters of the "constrained" machine. This seems the more strange when the parameters of the "parent" machine are not even "normal" (separated), as is the case in the Rayleigh method for vibrations of continuous systems. Another strange remark is that G. Kron's "primitive" network (a finite number of disconnected coils) is not acceptable as the "parent" machine because it lacks "concrete physical meaning".

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